

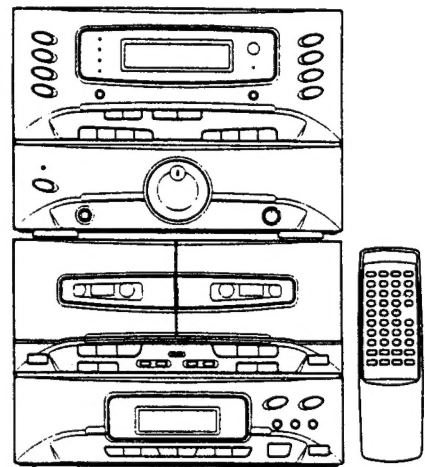
# UHER

## Reference 2000

**AM/FM STEREO RECEIVER  
CASSETTE PLAYER/RECORDER  
3-DISC COMPACT DISC CHANGER**



**UHER-00320**



### **SPECIFICATIONS**

Power Source  
Power Consumption  
Output Power

230V/50Hz  
700 Watts  
120W x2 (at 0.9% THD)

### **Tuner Section**

Frequency Range  
Intermediate Frequency  
Sensitivity  
Multiplex Separation

AM: 531-1620 kHz FM: 87.5-108 MHz  
AM: 450 kHz FM: 12.7 MHz  
AM: 900 uV/M (at 1MHz) FM: 10 uV (at 98MHz)  
30 dB

### **Cassette Section**

Tape Speed  
Frequency Response  
Wow & Flutter

1-7/8 IPS (4.75 P.S.)  
63 Hz - 12.5 kHz  
0.2% WRMS

### **Amplifier Section**

Total Harmonic Distortion (1 kHz)  
Signal To Noise Ratio  
Output Power (at 0.9% THD)

0.1%  
70 dB  
120W x 2

### **Compact Disc Player Section**

Channel Separation (1 kHz)  
Total Harmonic Distortion  
Signal To Noise Ratio

50 dB  
0.1%  
65 dB

### **Dimensions**

W= 279mm (11") H=394mm (15-1/2")  
D= 311mm (12-1/4")

### **Weight**

14.3 kgs (31.46 lbs)

# SERVICE PUBLICATION

Note All the specifications and features are subject to change without notice

## CD Adjustments

The following steps should be performed before attempting adjustments in the CD section.

1. Remove the turntable by sliding the Guide Plate outward. (See Fig. 9)
2. Disassemble the Base Cover by removing 2 screws. (See Fig. 9)

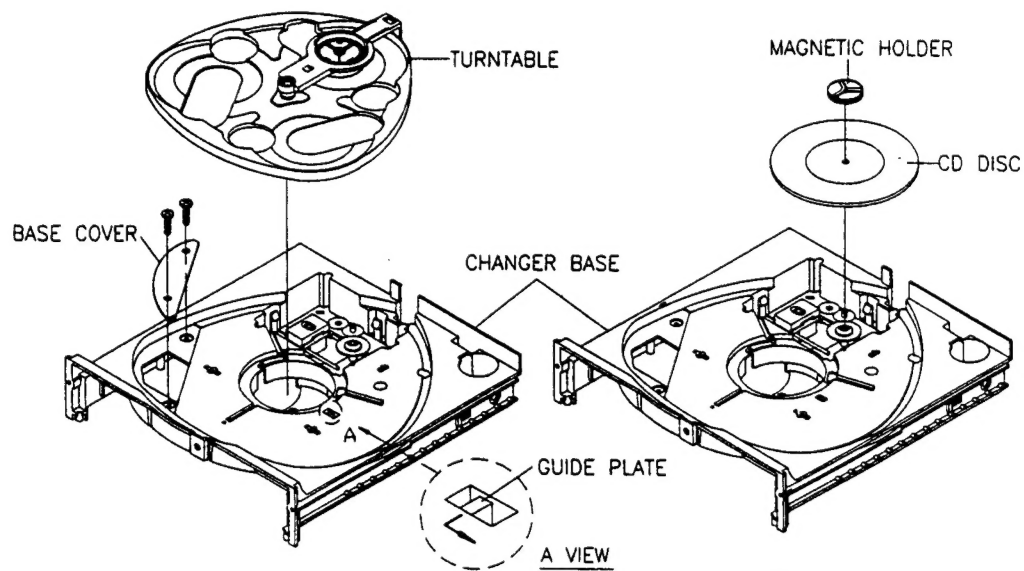


Figure 9

### CAUTION:

The laser beam may always be active when the turntable is removed.  
Use of controls for adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.  
The compact disc player should not be adjusted or repaired by anyone except properly qualified service personnel.

### RF ADJUSTMENT

1. Connect CN08 to the power supply, and CD player in stop mode.
2. Connect the DC meter to CN10-.
3. Adjust VR01, for a reading of  $0V \pm 20mV$ . (See Fig. 10)

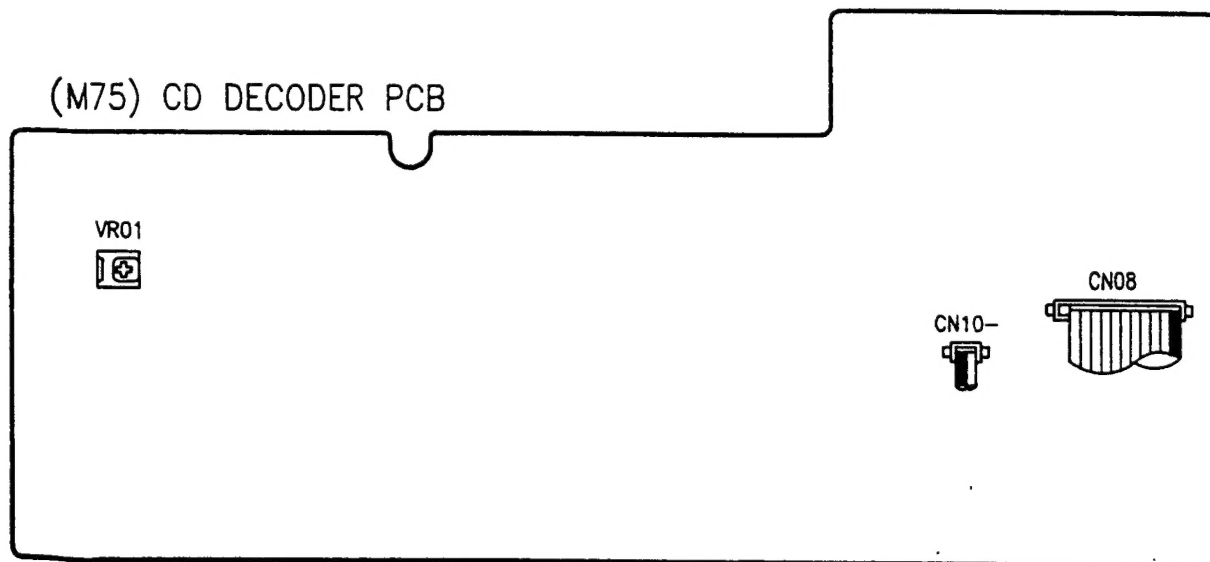
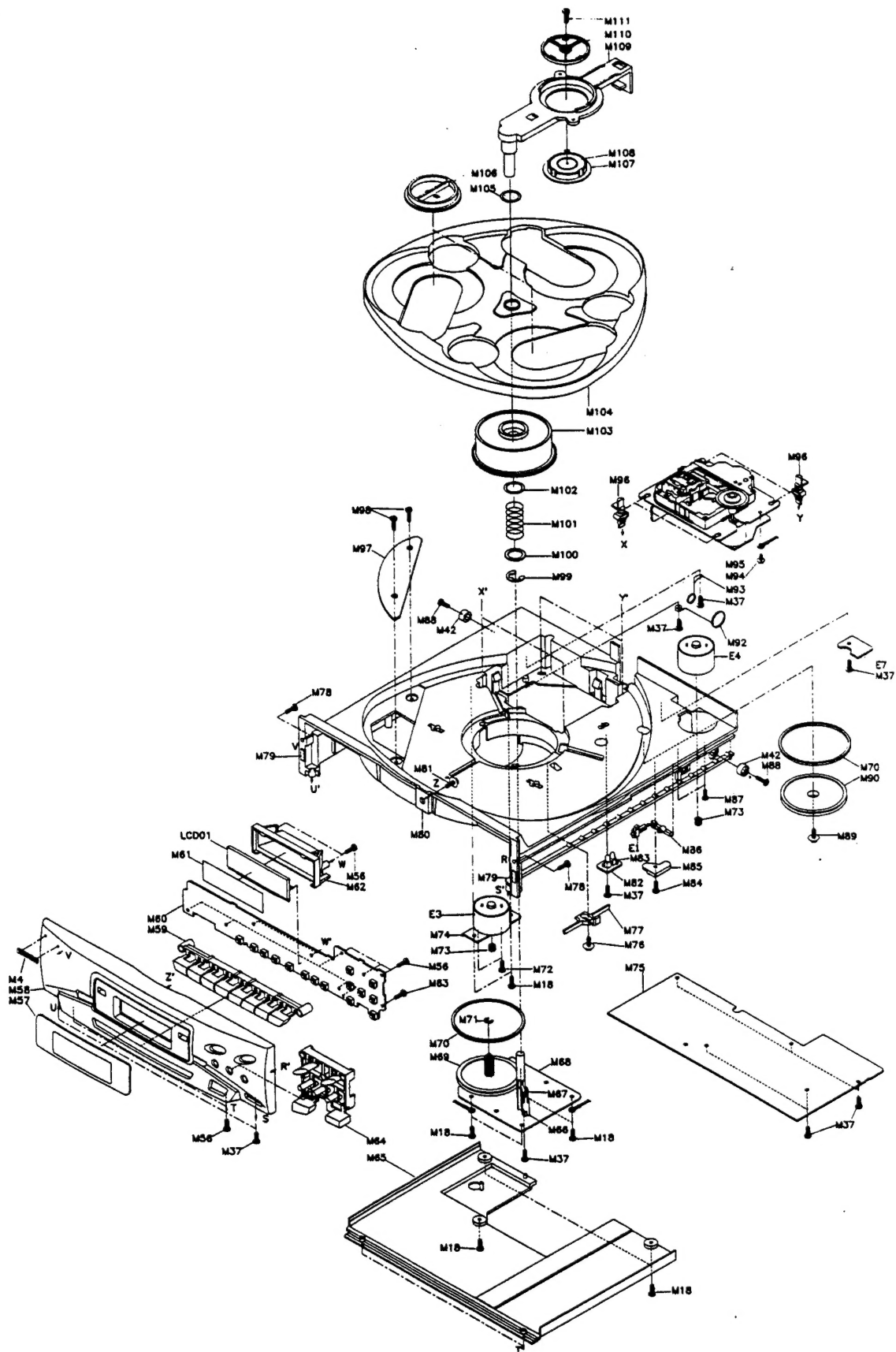
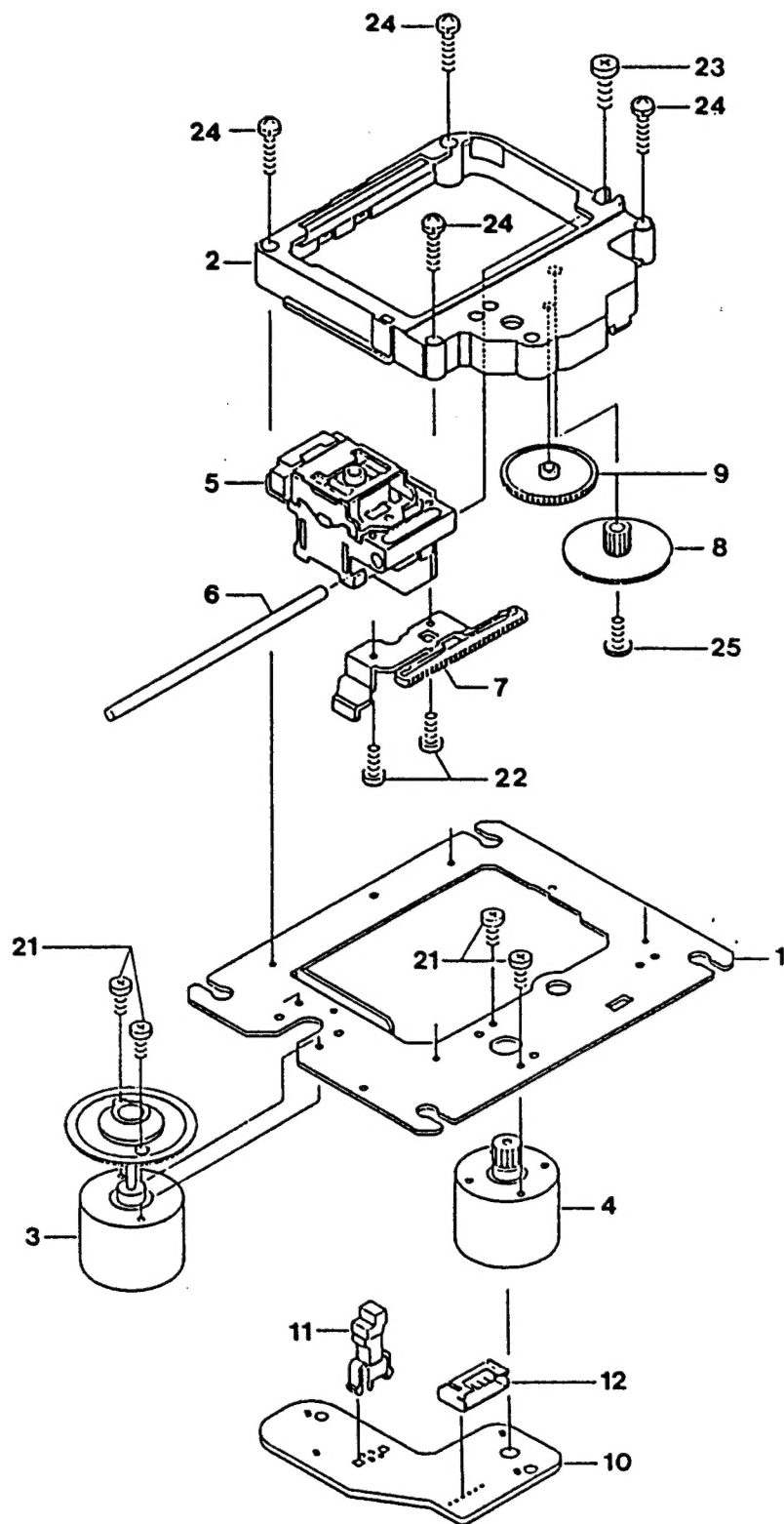


Figure 10

## Mechanical Exploded View - CD

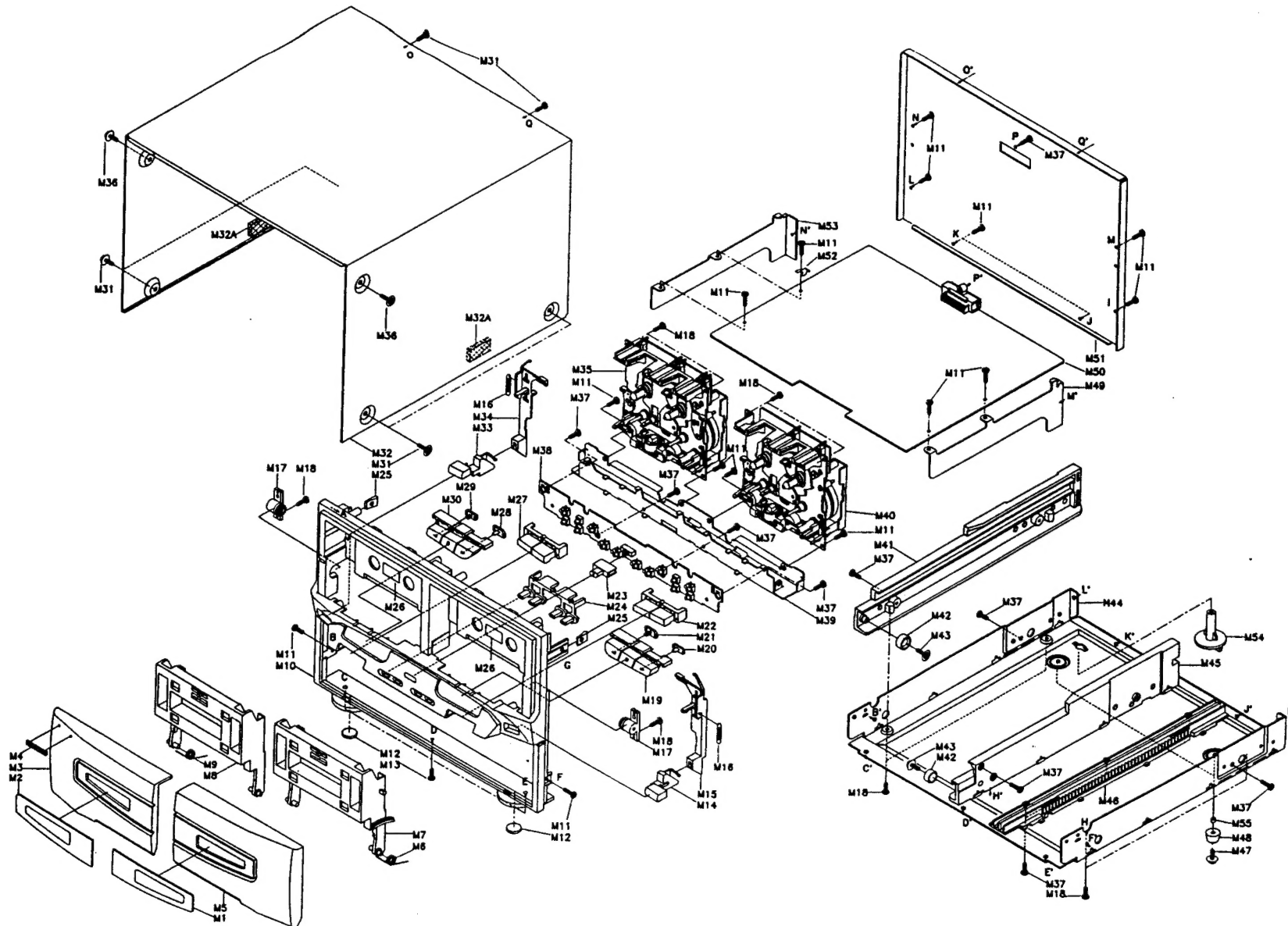


## CD Deck Exploded View

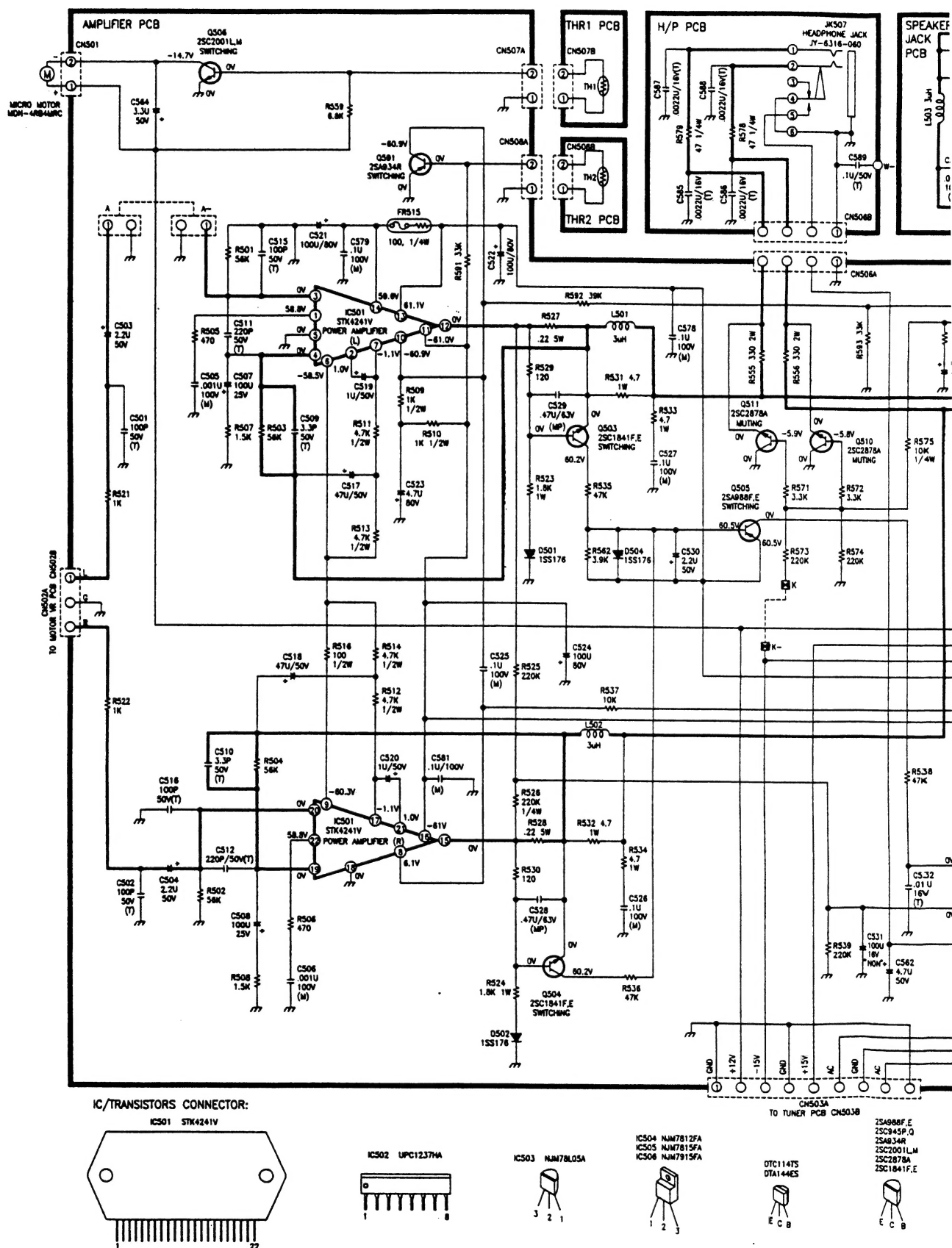


This exploded view diagram illustrates the assembly of the Sony SCD-3000 CD player. The main components shown are the front panel (top left), the main chassis (center), and the rear panel (bottom right). The diagram includes numerous callouts for screws (e.g., M29, M31, M37, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55) and other parts (e.g., M28, M28A, M23, M24, M25, M26, M27, M30, M32, M33, M34, M35, M36, M38, M39A, M47A, M48, M49, M50, M51, M52, M53, M54, M55). The front panel features a display window, a disc tray, and various control buttons. The main chassis contains the motor, transformer (PT1), and various integrated circuits (IC501, IC504, IC505). The rear panel includes a speaker grille and a power switch. The diagram also shows the internal wiring and the placement of various components within the chassis.

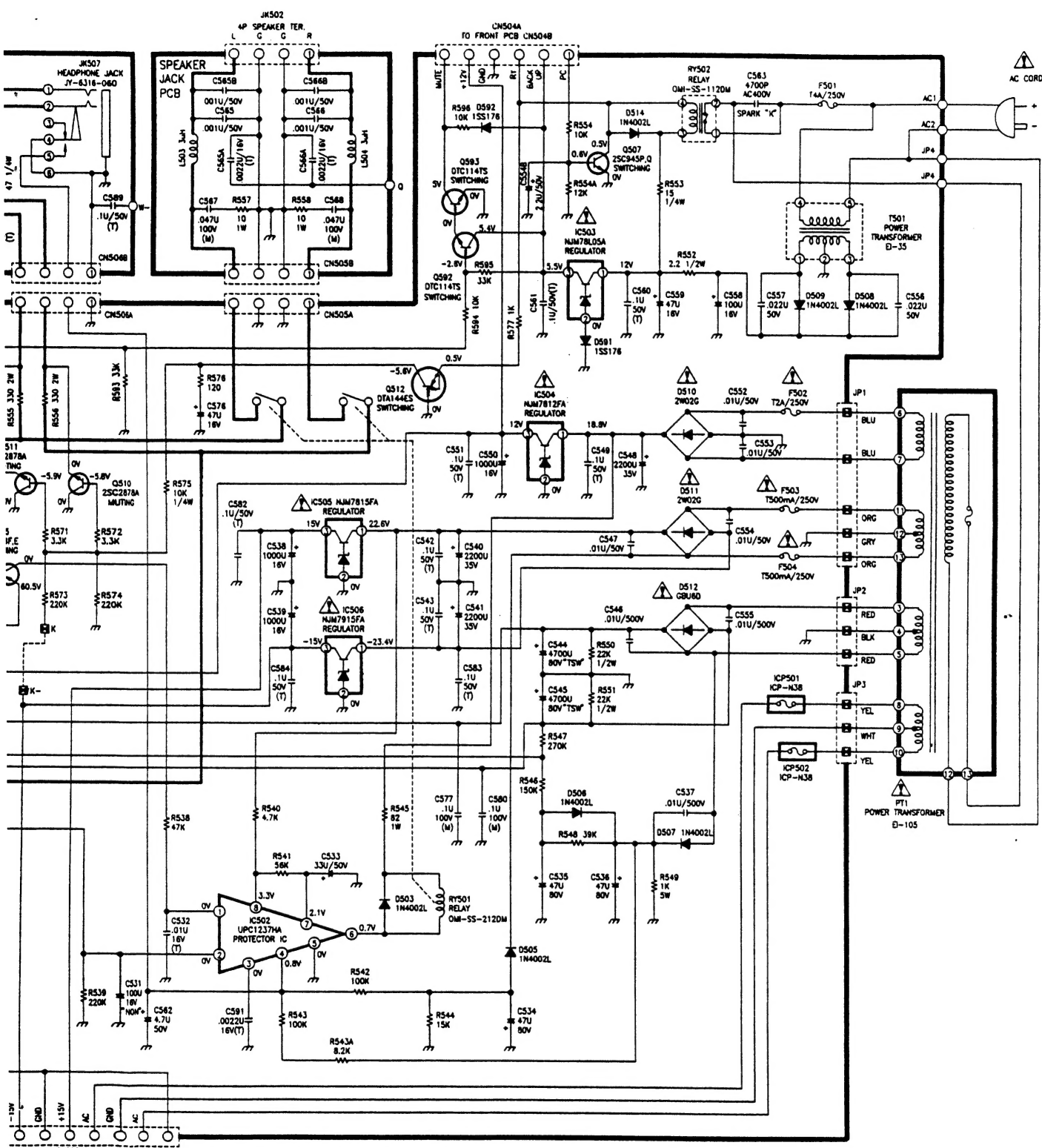
Mechanical Exploded View-Cassette



### Schematic Diag



Schematic Diagram - Amp.



SCHEMATIC NOTES:

1. THE DC VOLTAGES WERE TAKEN WITH NO SIGNAL INPUT.
2. RESISTANCE VALUES ARE IN OHMS (K=1000, M=MEG OHM).
3. UNLESS OTHERWISE NOTED, ALL RESISTORS ARE 1/8 WATT CARBON FILM,  $\pm 5\%$  TOLERANCE.
4. ALL VOLTAGES MEASURED FROM GROUND WITH A HIGH IMPEDANCE METER (10 MEG OHMS MIN).
5. (T)=MULTI-LAYER CERAMIC CAPACITOR.
6. REFER TO PARTS LIST FOR VOLTAGE RATINGS OF CAPACITORS.
7.  $\text{---}$  =COMMON GROUND SYMBOL.
8.  $\text{---}$  = INDICATES SIGNAL PATH OF CIRCUIT.
9. TO LOCATE CONNECTOR HOOKUPS MATCH THE ALPHA (OR NUMERIC) DESIGNATION TO THE CORRESPONDING ALPHA (OR NUMERIC) DESIGNATION (EXAMPLE:CONNECTOR A CONNECTS TO CONNECTOR A)

TO TUNER PCB CH503B

2SA988F E  
2SC945P Q  
2SA834R  
2SC2001LM  
2SC2878A  
2SC1841F E

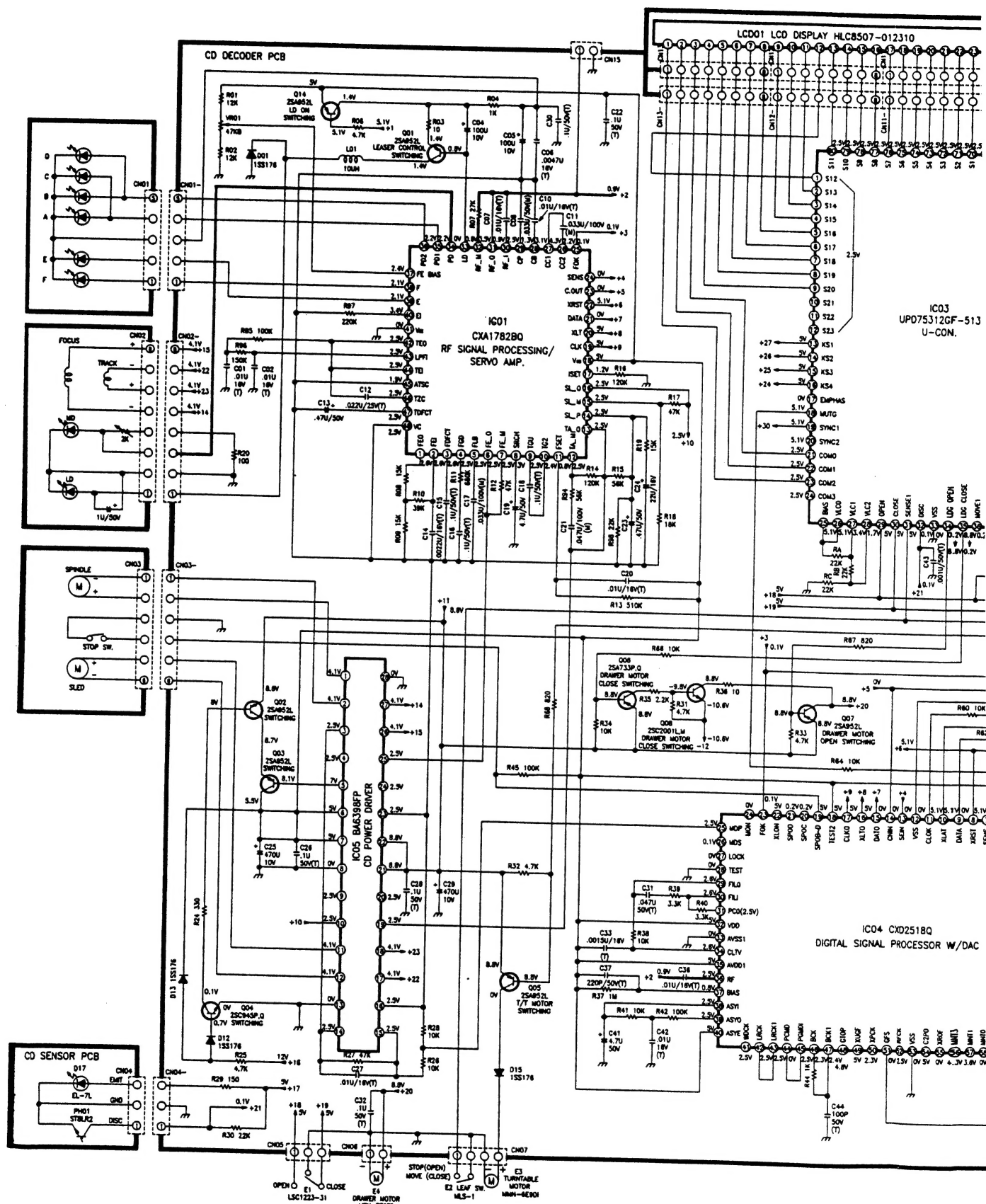
DTC1147S  
DTA144ES

E C B

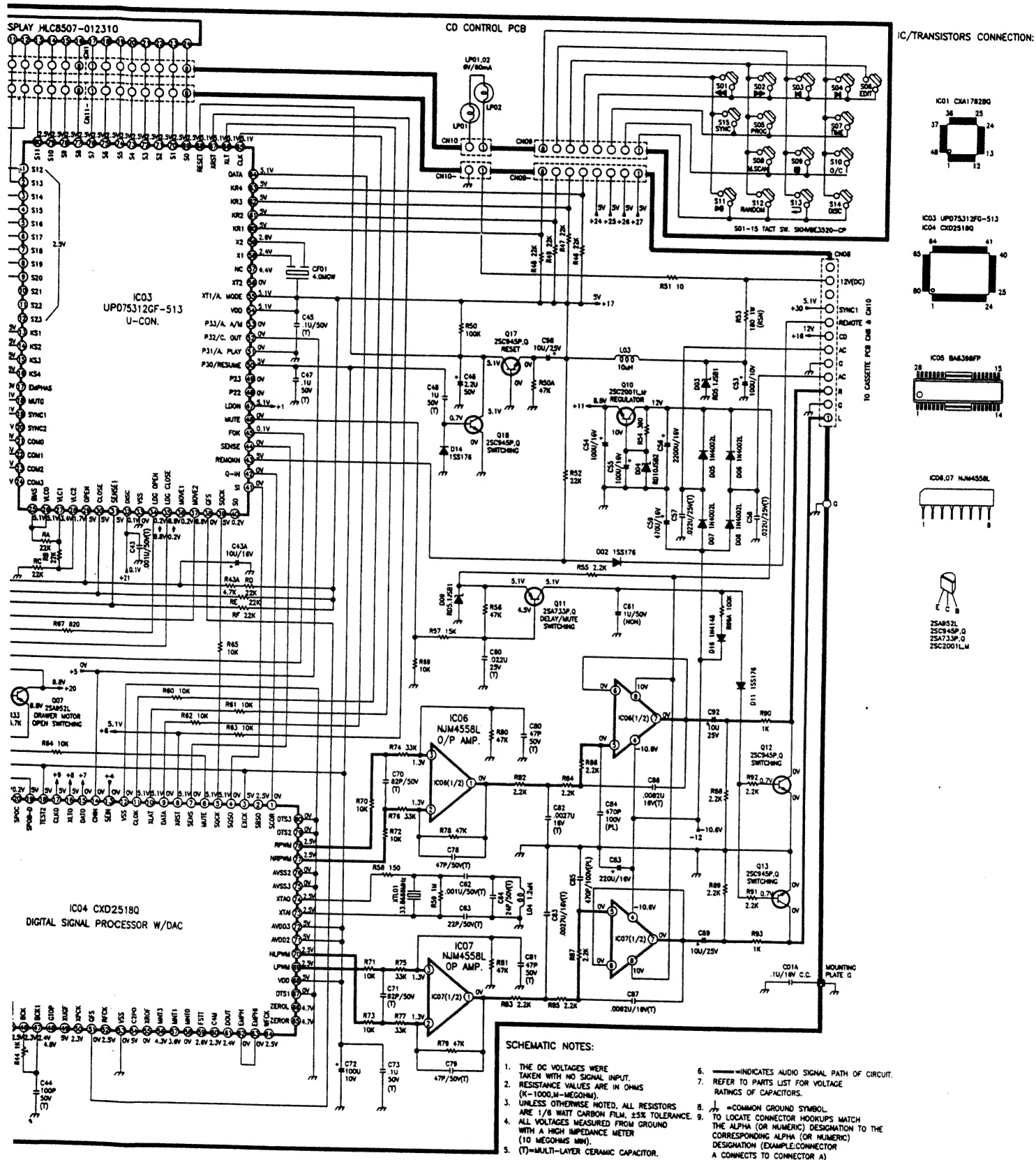
E C B



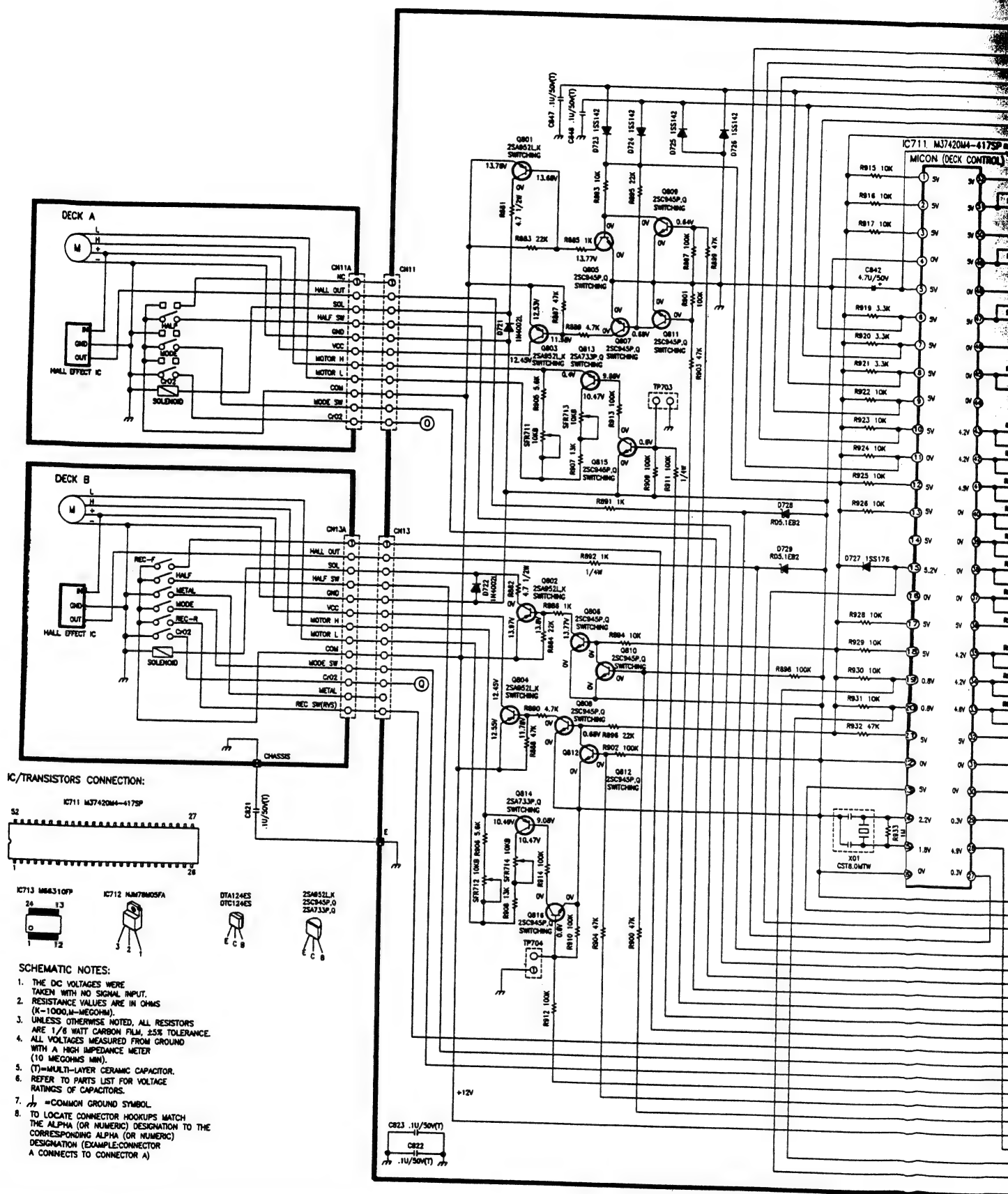
### Schematic Diagram



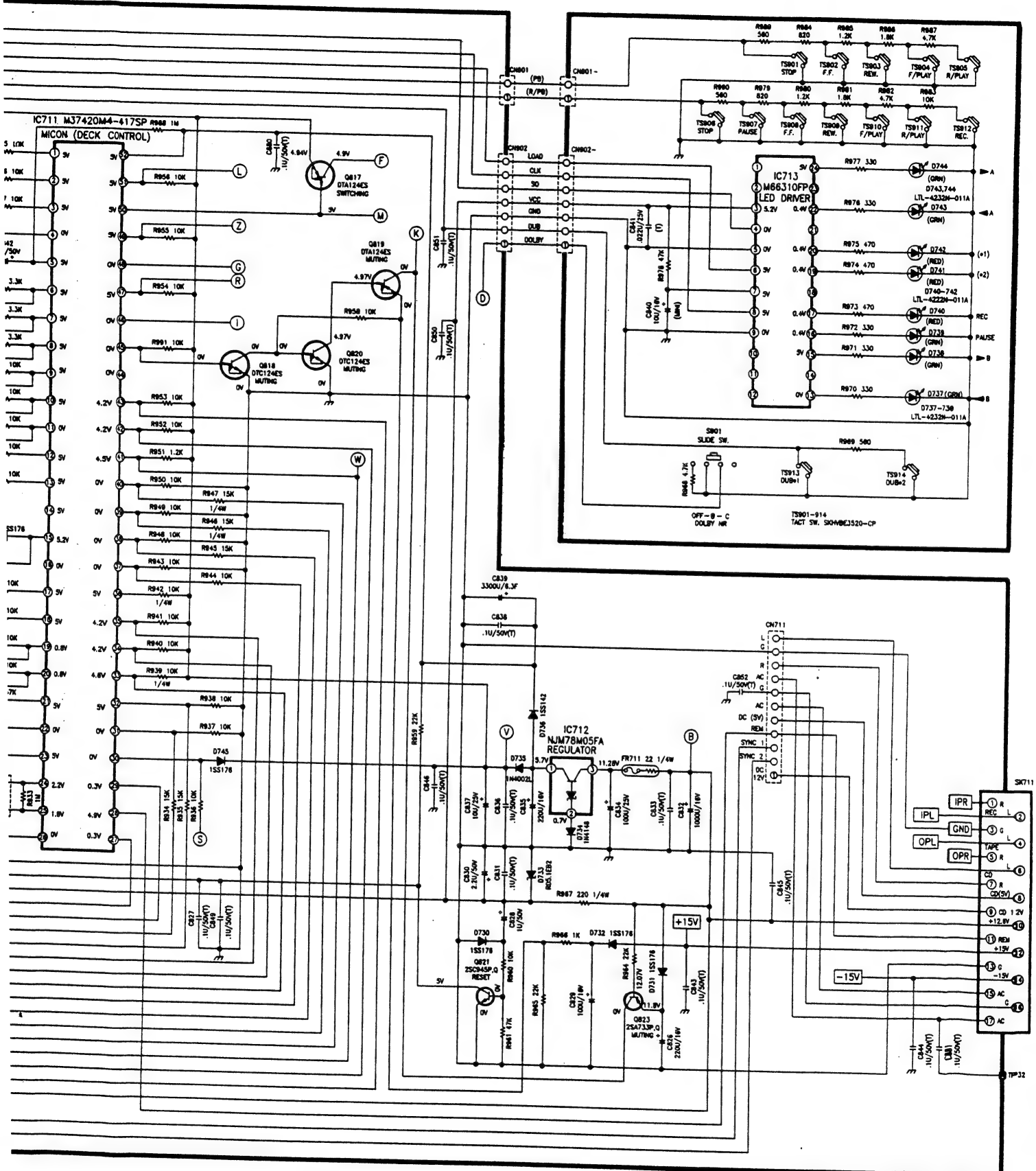
### Schematic Diagram- CD



# Schematic Diagram

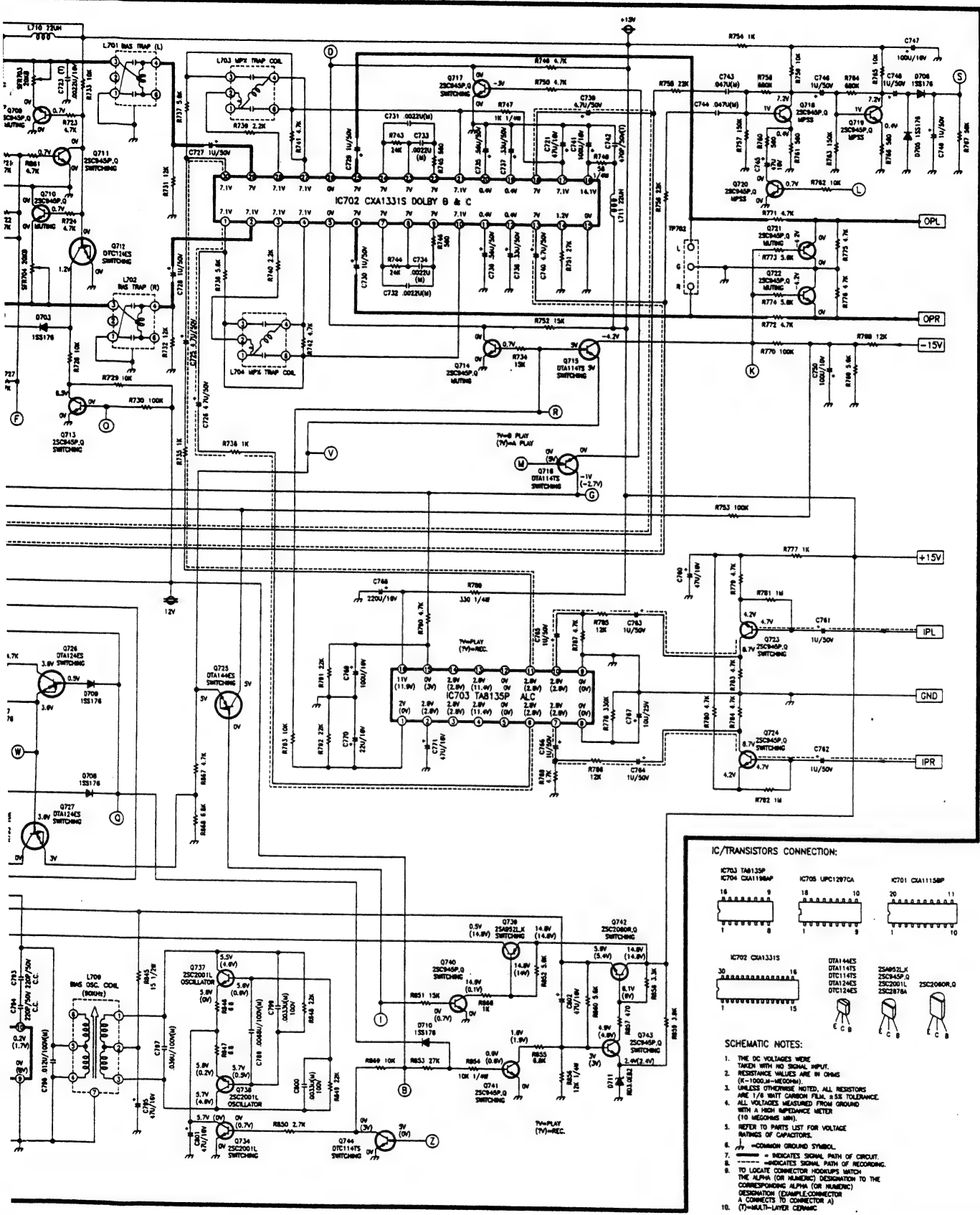


ematic Diagram- Cassette (2/2)

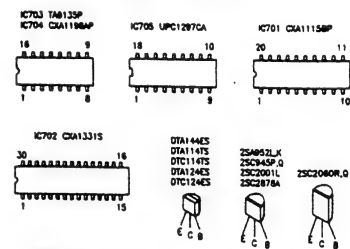




atic Diagram- Cassette (1/2)



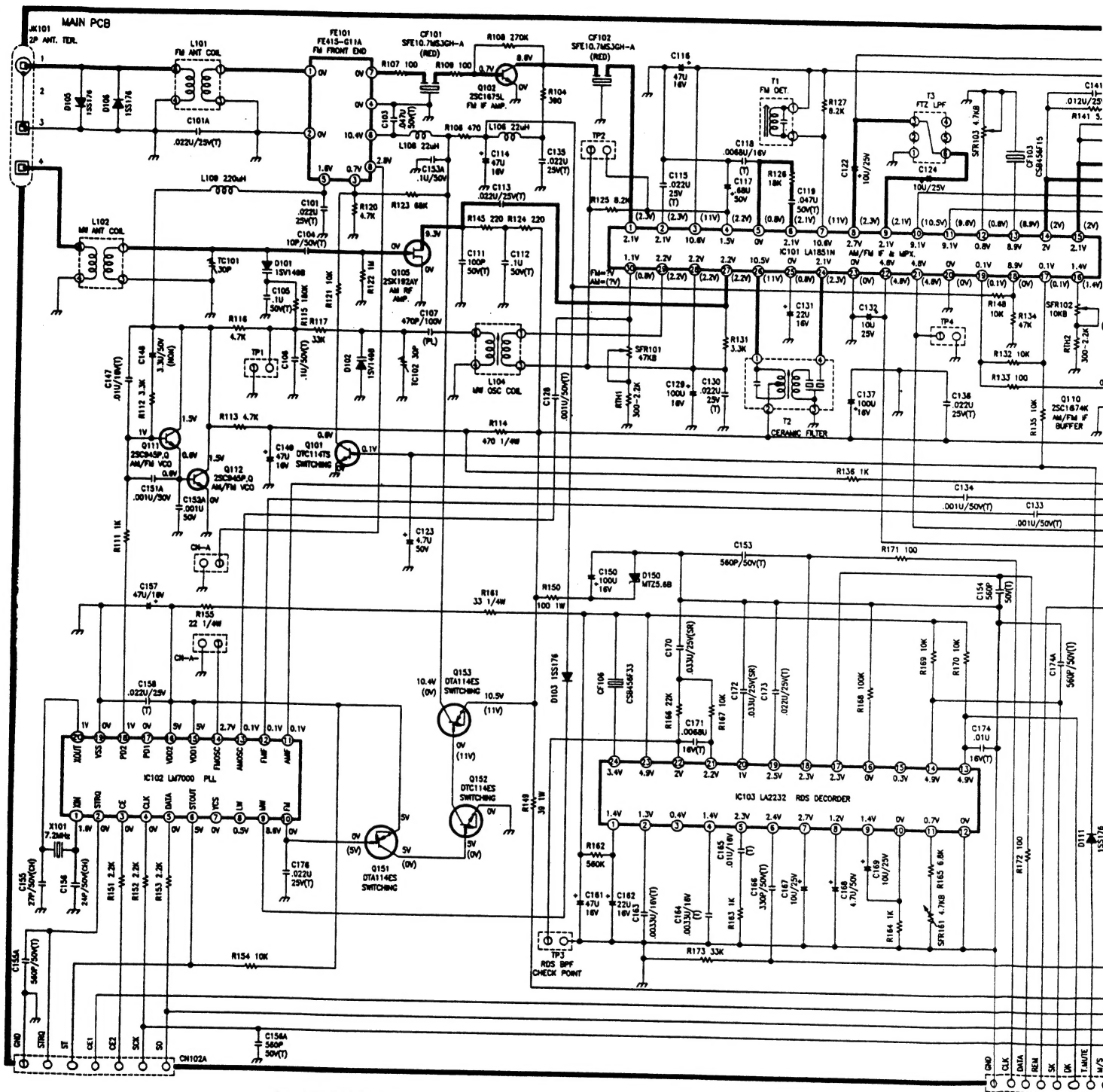
IC/TRANSISTORS CONNECTION:



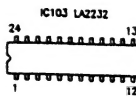
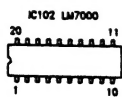
SCHEMATIC NOTES:

1. THE DC VOLTAGES WERE TAKEN WITH NO SIGNAL INPUT.
2. RESISTANCE VALUES ARE IN OHMS (K=1000, M=1000000).
3. UNLESS OTHERWISE NOTED, ALL RESISTORS ARE 1/8 WATT CARBON FILM, 5% TOLERANCE.
4. ALL VOLTAGES MEASURED FROM GROUND WITH A HIGH IMPEDANCE METER (10 MEGOHMS MIN).
5. REFER TO PARTS LIST FOR VOLTAGE RATINGS OF CAPACITORS.
6. --- COMMON GROUND SYMBOL.
7. --- INDICATES SIGNAL PATH OF CIRCUIT.
8. --- INDICATES SIGNAL PATH OF RECORDING.
9. TO LOCATE CONNECTOR HOODUPS MATCH THE ALPHA (OR NUMERIC) DESIGNATION TO THE CORRESPONDING ALPHA (OR NUMERIC) DESIGNATION (EXAMPLE: CONNECTOR A CONNECTS TO CONNECTOR A).
10. (T)=MULTI-LAYER CERAMIC.

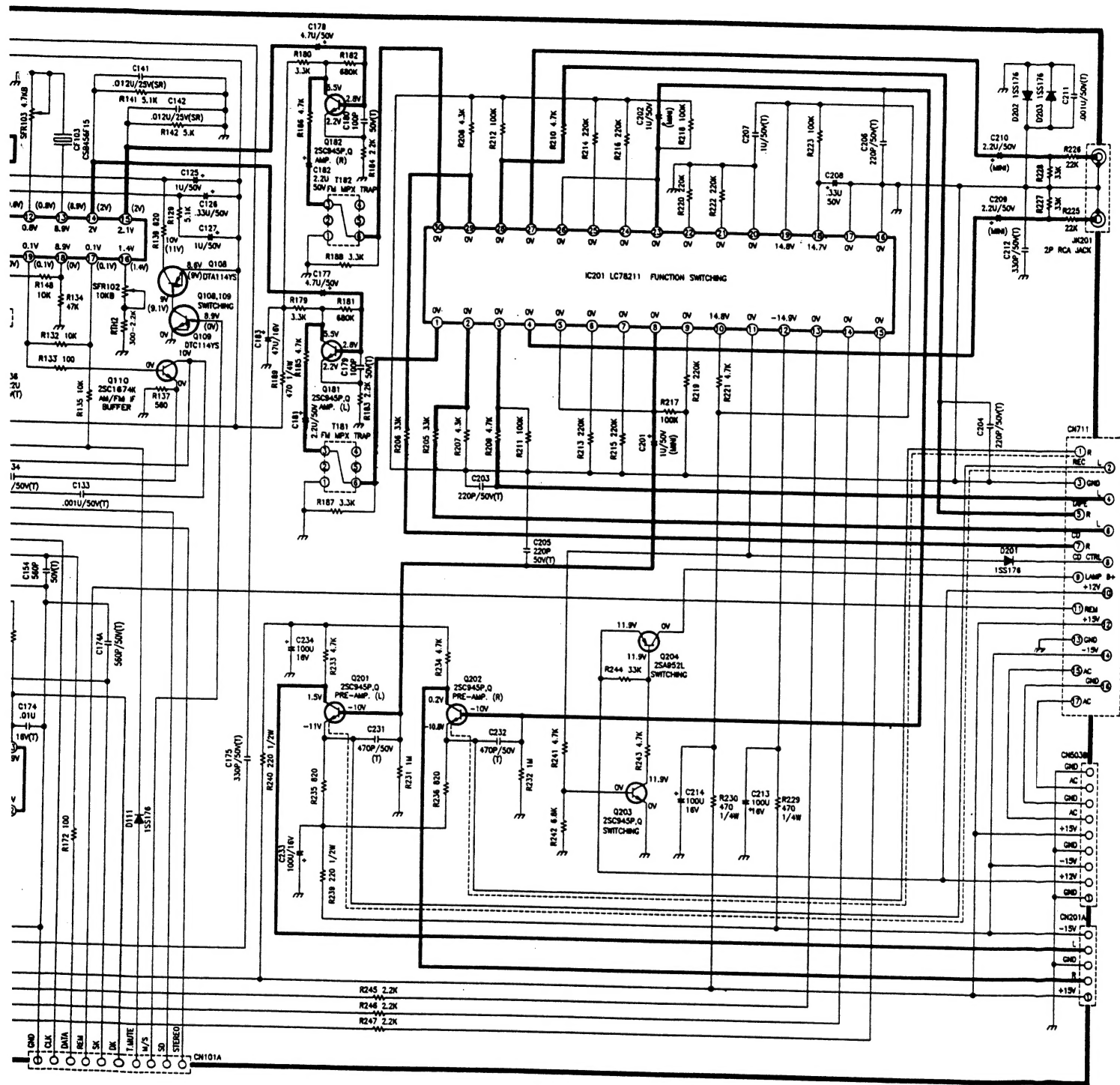




**IC/TRANSISTORS CONNECTION:**



# Schematic Diagram - Main



## SCHEMATIC NOTES:

1. THE DC VOLTAGES WERE TAKEN WITH NO SIGNAL INPUT.
2. RESISTANCE VALUES ARE IN OHMS (K=1000, M=MEGAS).
3. UNLESS OTHERWISE NOTED, ALL RESISTORS ARE 1/8 WATT CARBON FILM,  $\pm 5\%$  TOLERANCE.
4. ALL VOLTAGES MEASURED FROM GROUND WITH A HIGH IMPEDANCE METER (10 MEGOHMS MIN).
5. (T)=MULTI-LAYER CERAMIC CAPACITOR.
6. REFER TO PARTS LIST FOR VOLTAGE RATINGS OF CAPACITORS.
7.  $\text{---}$  = COMMON GROUND SYMBOL.
8.  $\text{---}$  = INDICATES SIGNAL PATH OF CIRCUIT.
9.  $\text{---}$  = INDICATES SIGNAL PATH OF AM MODE.
10. TO LOCATE CONNECTOR HOOKUPS MATCH THE ALPHA (OR NUMERIC) DESIGNATION TO THE CORRESPONDING ALPHA (OR NUMERIC) DESIGNATION (EXAMPLE: CONNECTOR A CONNECTS TO CONNECTOR A).

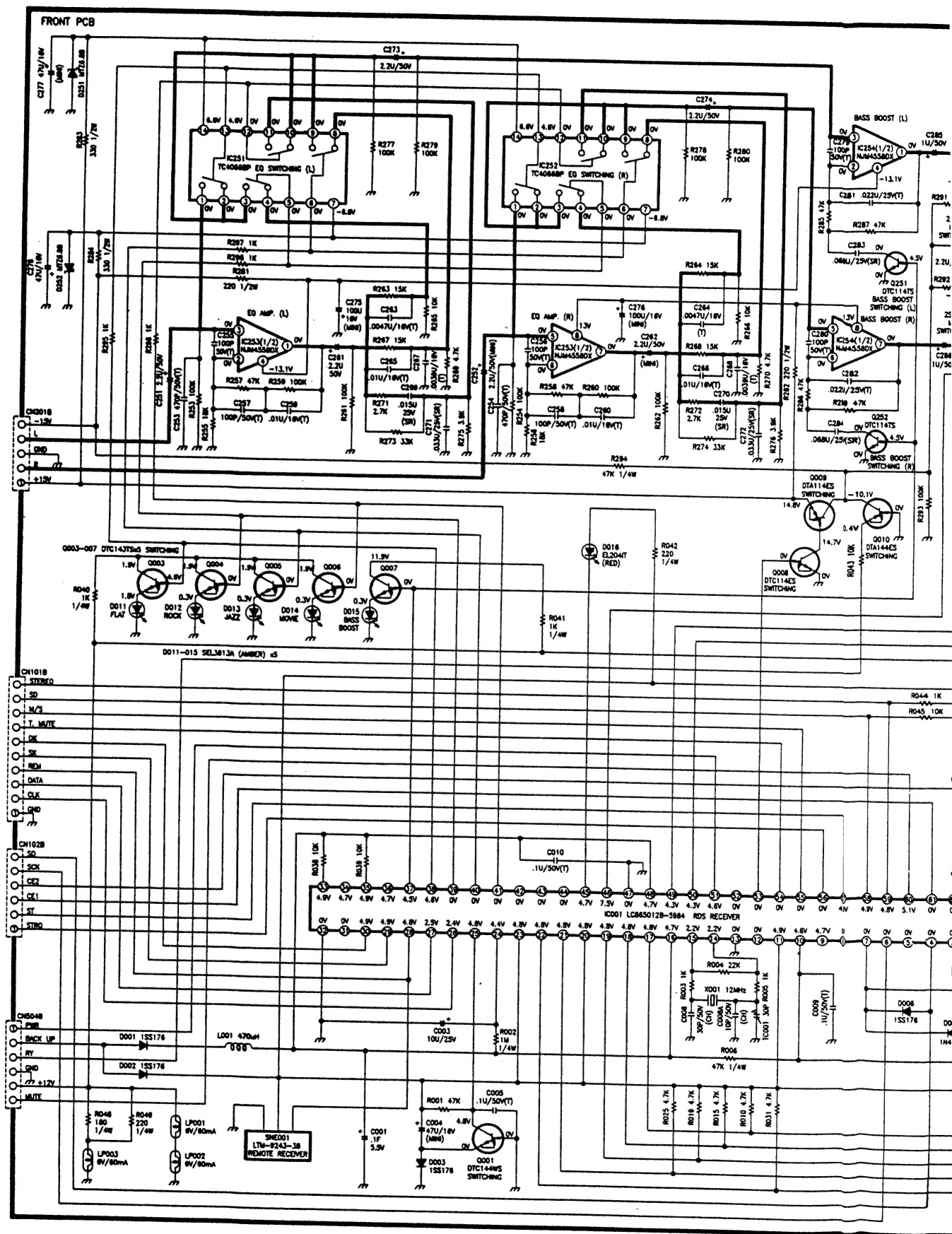
DTA114YS  
DTA114YS  
DTA114ES  
DTA114ES

25K192AY





## Schematic



# Schematic Diagram-Front

